PRELIMINARY TEST REQUESTS FROM THE INCINERATOR WORK GROUP

Submitted to:

ICCR Coordinating Committee
Fort Collins, CO

April 28, 1998

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The following are preliminary test requests from the Incinerator Work Group. Although details regarding these test requests need to be worked out (e.g., specific test conditions, number of tests, and facilities to be tested), we ask for Coordinating Committee concurrence with these requests so that we can begin working to develop formal test plans and get testing underway as soon as possible.

These test requests address the needs for testing at pathological incinerators and drum reconditioning units. We expect to submit a second and final set of test requests to the Coordinating Committee at its July meeting. This second set of tests will likely address testing needs for parts reconditioning units and wood and chemical/petroleum/pharmaceutical incinerators.

PRELIMINARY TESTING NEEDS FOR THE PATHOLOGICAL WASTE AND CREMATORY INCINERATORS SUBCATEGORY

Prepared by: IWG Subteam #1
Date: April 10, 1998

PURPOSE AND NEED FOR TESTING: There is a need for data showing the effect that varying ratios of non-tissue pathological waste and up to 10% "other" waste have on emission levels of 129 pollutants. There are limited test data on single chamber units, which represent a large fraction of the subcategory population. Secondary chamber operating temperature is an important parameter that may be part of the final regulation. There are limited data suggesting how temperature affects Section 129 pollutants in these types of incinerators.

SUMMARY OF CURRENTLY AVAILABLE TEST DATA: We lack complete data that represent the scenarios we wish to evaluate. It is unlikely that any useful data will be received from requested test reports.

COMBUSTION UNIT AND WASTE DESCRIPTION: Units that are expected to be representative of all the units in the subcategory. For the less than 100 lb/hr group, the unit tested shall be of a single-chamber design. Non-tissue wastes will be those materials normally burned that are expected to give the highest emission levels.

NUMBER OF COMBUSTION UNITS AND TESTS:

Three units total. One representative unit in each of the following size groupings:

Less than 100 lb/hr mass burn rate
100 to 500 lb/hr
Greater than 500 lb/hr.

There shall be six tests for the greater than 500 lb/hr unit (each test consisting of 3 sampling periods, or runs), six tests for the 100 to 500 lb/hr unit, and two tests for the less than 100 lb/hr unit.

OPERATING CONDITIONS: See table below.

POLLUTANTS: All 129 pollutants in every testing scenario.

CANDIDATE FACILITIES FOR TESTING: Specific facilities have not been identified.

LEVERAGING OF RESOURCES: Subteam #1 members can attempt to identify units to test and help prepare the test plan.

SIZE GROUPING	OPERATING CONDITIONS	ONE TEST AT EACH OF THE FOLLOWING CONDITIONS		
		% TISSUE	% BEDDING	% OTHER*
Greater than 500 lb/hr	Secondary chamber temperature of 1500ºF	70	20	10
		30	60	10
		30	40	30
	Secondary chamber temperature of 1800ºF	70	20	10
		30	60	10
		30	40	30
100 to 500 lb/hr	Secondary chamber temperature of 1500ºF	90	10	0
		70	20	10
		30	60	10
	Secondary chamber temperature of 1800ºF	90	10	0
		70	20	10
		30	60	10
Less than 100 lb/hr	Standard operating conditions	100	0	0
		90	0	10

*Other material to be determined.

PRELIMINARY TESTING NEEDS FOR THE DRUM RECLAIMER UNIT SUBCATEGORY

Prepared by: IWG Subteam # 4
Date: April 10, 1998

PURPOSE AND NEED FOR TESTING: IWG subteam #4 is concerned over the paucity of emissions data for certain Section 129 pollutants. Subteam #4 has conducted an extensive search for test data to characterize drum reclaimer emissions, including appeals for stack test data through the industry trade group (the Association for Container Reconditioners [ACR]), searches for test data and technical documents through EPA and state agency resources, and searches for existing state air permits that specify emission limits. While some data have been obtained, we have only a single reference for several pollutants with very questionable data quality. The IWG requests three stack tests to fill these data gaps. The requested stack tests are listed below in order of priority.

SUMMARY OF CURRENTLY AVAILABLE TEST DATA: The ICR survey did not identify any HAPs emission data for drum reclaimer unit survey respondents. The trade group has found a single reference for some Section 129 pollutants. No data exist to characterize small drum furnaces.

COMBUSTION UNIT AND WASTE DESCRIPTION: Typically these units are semi-continuous tunnel furnaces equipped with an afterburner. Process rates range from 100 to 500 55-gal drums per hour. Container residues may include hazardous materials. Containers must be empty as defined by RCRA prior to furnace processing.

NUMBER OF COMBUSTION UNITS AND TESTS: The IWG proposes to test 3 drum reclaimer units. The first priority would be a full sampling program of Section 129 pollutants on a mid-large size drum furnace that is at least 15 years old. The second priority would be a smaller capacity drum furnace owned by a company meeting the SBA definition of a small business. The third priority would be a mid-large size drum furnace that is newer than 15 years old.

OPERATING CONDITIONS: The units would operate at or near the maximum rated/permitted capacity and would utilize a thermal oxidizer. Operating conditions would be representative of normal operating conditions.

POLLUTANTS: All Section 129 pollutants concurrently.

CANDIDATE FACILITIES FOR TESTING: The ACR is currently working with its membership to identify facilities meeting the criteria of the IWG.

LEVERAGING OF RESOURCES: The ACR will assist in identifying good candidates for testing. They also will be liaison between EPA and the facility.